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13. (Twice Amended) A process for producing a corrosion-
and wear-resistant layer on a substrate by thermal spraying as
set forth in claim 1 characterised in that it has at least 20%
by weight of magnetite (Fe_3O_4 and/or FeFe_2O_4).

14. (Amended) A process as set forth in claim 13
characterised in that the material comprises pure magnetite.

15. (Amended) A process as set forth in claim 13
characterised in that the material comprises magnetite and at
least one further metallic material.

16. (Amended) A process as set forth in claim 13
characterised in that the material comprises magnetite and at
least one intermetallic compound.

17. (Amended) A process as set forth in claim 13
characterised by an addition of carbide or carbides or nitride
or nitrides or silicide or silicides or boride or borides or
oxide or oxides in the material.

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18. (Amended) A process as set forth in claim 13 characterised by the addition of a mixture of metals, intermetallic compounds, carbides, nitrides, silicides, borides and/or oxides in the material.

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amended*

19. (Amended) A process as set forth in claim 15 characterised by magnetite and an addition of up to 50% by weight of Cr, CrNi or a ferritic steel in the material.

20. (Twice Amended) A process as set forth in claim 13 characterised in that the material comprises magnetite and carbides of W, Cr, Mo, Nb, Ta, Ti or V.

21. (Amended) A process as set forth in claim 20 characterised in that the material comprises magnetite with an addition of up to 30% by weight of tungsten and/or chromium carbides.

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23. (Amended) A process as set forth in claim 13 characterised by a mixture of magnetite and chromium oxide in the material with a proportion of the chromium oxide of between 1 and 40%.

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~~24. (Twice Amended) A process as set forth in claim 13 characterised by a grain size of the powder spray material of between 0.05 and 150 μ m.~~

25. (Twice Amended) A process as set forth in claim 13 characterised by a filling wire in the form of wire spray material whose filling comprises magnetite and whose sheath comprises an alloy.

26. (Twice Amended) A process as set forth in claim 13 characterised by a powder grain with good flow properties, which is produced from the powder material mixture by spray drying.

27. (Twice Amended) A process as set forth in claim 13 characterised by a powder grain which is resistant to separation of its mixture and which is produced from the powder material mixture by means of an agglomeration process.

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concluded*

NEW CLAIMS

28. A process for producing a corrosion- and wear-resistant layer on a substrate by thermal spraying as set forth in claim 1 characterised in that it has more than 30% by weight of magnetite (Fe_3O_4 and/or FeFe_2O_4).

29. A process as set forth in claim 21 characterised by magnetite and an addition of up to 40% by weight of Cr, CrNi or a ferritic steel in the material.

30. A process as set forth in claim 20 characterised in that the material comprises magnetite with an addition of up to 20% by weight of tungsten and/or chromium carbides.

31. A process as set forth in claim 13 characterised by a proportion of the chromium oxide of between 5 and 30% by weight.

32. A process as set forth in claim 13 characterised by a grain size of the powder spray material of between 0.1 and 120 μm .